



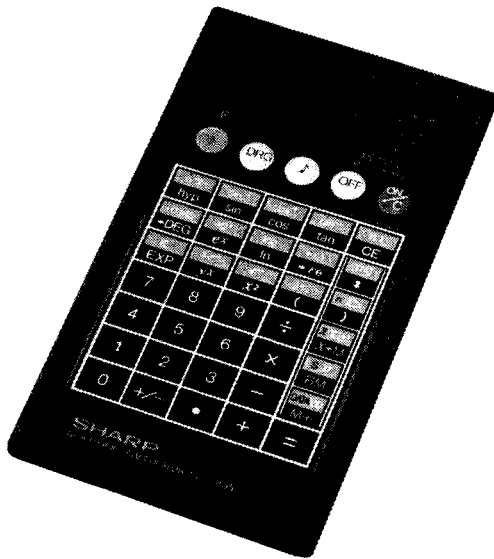
SERVICE MANUAL



SHAR-03693

CONTENTS

1. Specifications 1
2. Servicing 2
3. Circuit diagram 4
4. Parts & signal position 5
5. Part list 6
6. Part guide 7
7. Signal waveform 8



MODEL EL-5808

1. SPECIFICATIONS

(1) Keys' layout

POWER				
F	DRG		OFF	ON/C
$1/x$	\sin^{-1}	\cos^{-1}	\tan^{-1}	$n/$
hyp	sin	cos	tan	CE
\rightarrow DMS	10^x	log	$\rightarrow xy$	STAT
\rightarrow DEG	e^x	ln	$r\theta$	\uparrow
π	$3r$	r	$\Delta\%$	$n\Sigma x$
EXP	y^x	x^2	()
7	8	9	\div	$\bar{x} \Sigma x^2$
				$x \rightarrow M$
4	5	6	\times	S σ
				RM
1	2	3	-	DATA CD
				M +
0	$\pm/_$.	+	=

SHARP CORPORATION

3693

- (2) Display: FEM type liquid crystal
8 digits for mantissa part
2 digits for exponent part

• Character's shape

STAT
DEG
RAD
GRAD

- M: Memory symbol
-: Minus symbol
E: Error symbol
STAT: Statistical program symbol
DEG: Degree symbol
RAD: Radian symbol
GRAD: Grad symbol
X10: Exponent portion displays symbol
•: Battery indicator

- (3) Automatic power off function: 7±3 minutes
- (4) LSI: SC3759
- (5) Dimensions: 5(H) × 71(W) × 127(D) mm
3/16"(H) × 2-25/32"(W) × 5"(D)
- (6) Power supply: Silver oxide battery G-10G × 2
(Please note that only Eveready model 389, and Ray-O-Vac model RW49 or equivalent should be used)
- (7) Operating time: Approx. 600 hours of operation at silent mode.
(Display 5555. at ambient temperature 20°C (68°F))
Approx. 450 hours of operation
(1111 5 at ambient temperature 20°C (68°F))

2. SERVICING

(1) Disassembly Procedure

1. Turn over the set.
2. Take out the bottom panel after loosening the two screws that are securing the bottom panel (Fig. 1).
3. Pull out the two batteries (Fig. 2).
4. Carefully peel off the black masking sheet which is applied to the chassis. (Fig. 2)
5. Remove soldered leads of the PWB at three portions (Fig. 3 * mark)
6. Take out the chassis after removing the two pawls that are securing the chassis (Fig. 3 mark)
7. Take out the PWB unit after removing the three pawls that are securing the PWB unit. (Fig. 3 mark)

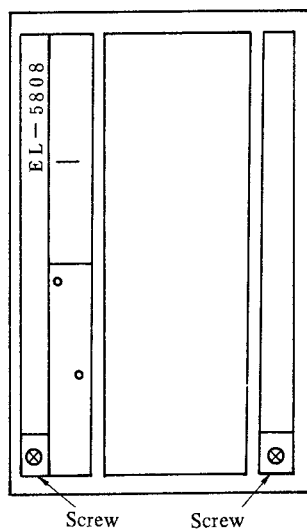


Fig. 1

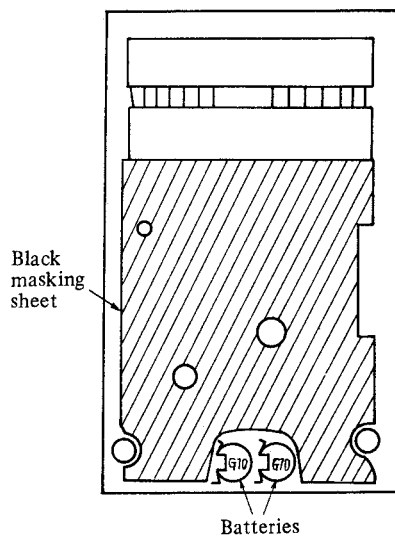


Fig. 2

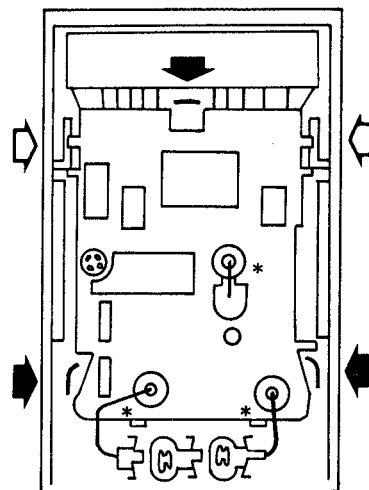
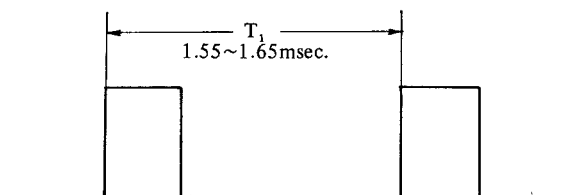


Fig. 3

(2) Control adjustment

Keep V_{in} to $3.15 \pm 0.05V$ make sure that the signal T_1 is within the range of $1.55msec \leq T_1 \leq 1.65msec$. If the above value is not satisfied, adjust it by using the control variable resistor.

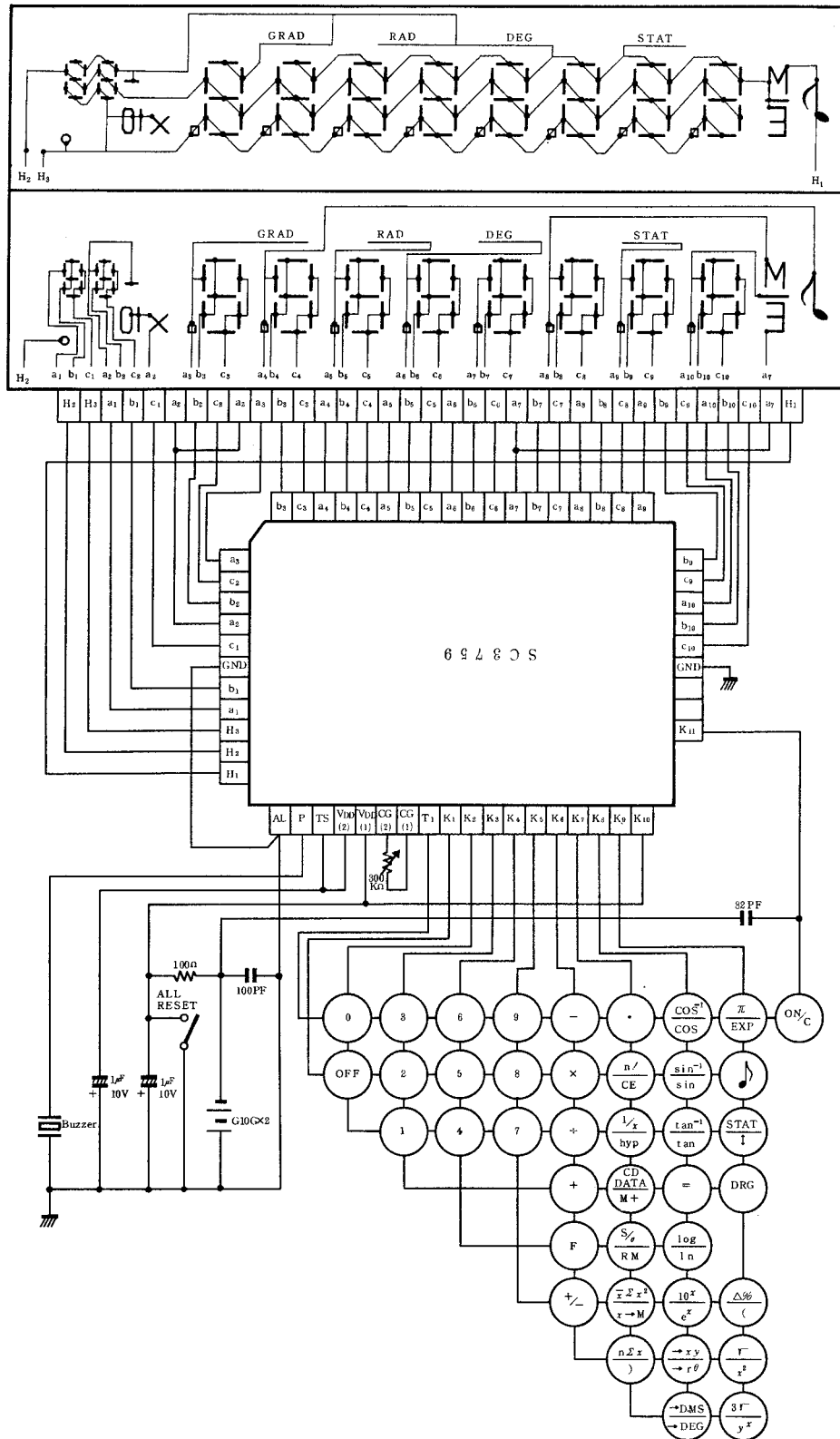


(3) All reset switch

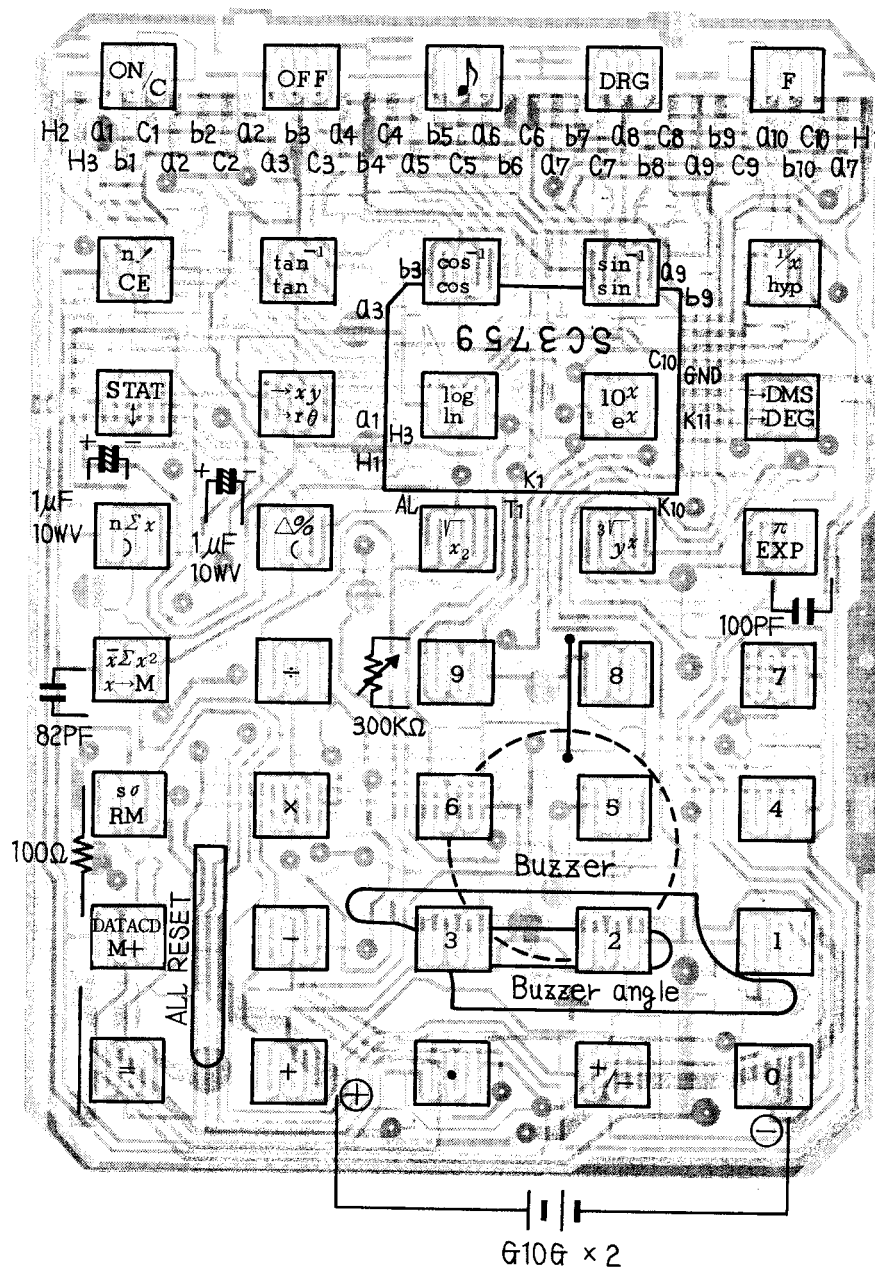
This is located on the back of the calculator. You should use this switch only when you can't clear the machine by touching ON/C key after the battery replacement.



3. CIRCUIT DIAGRAM



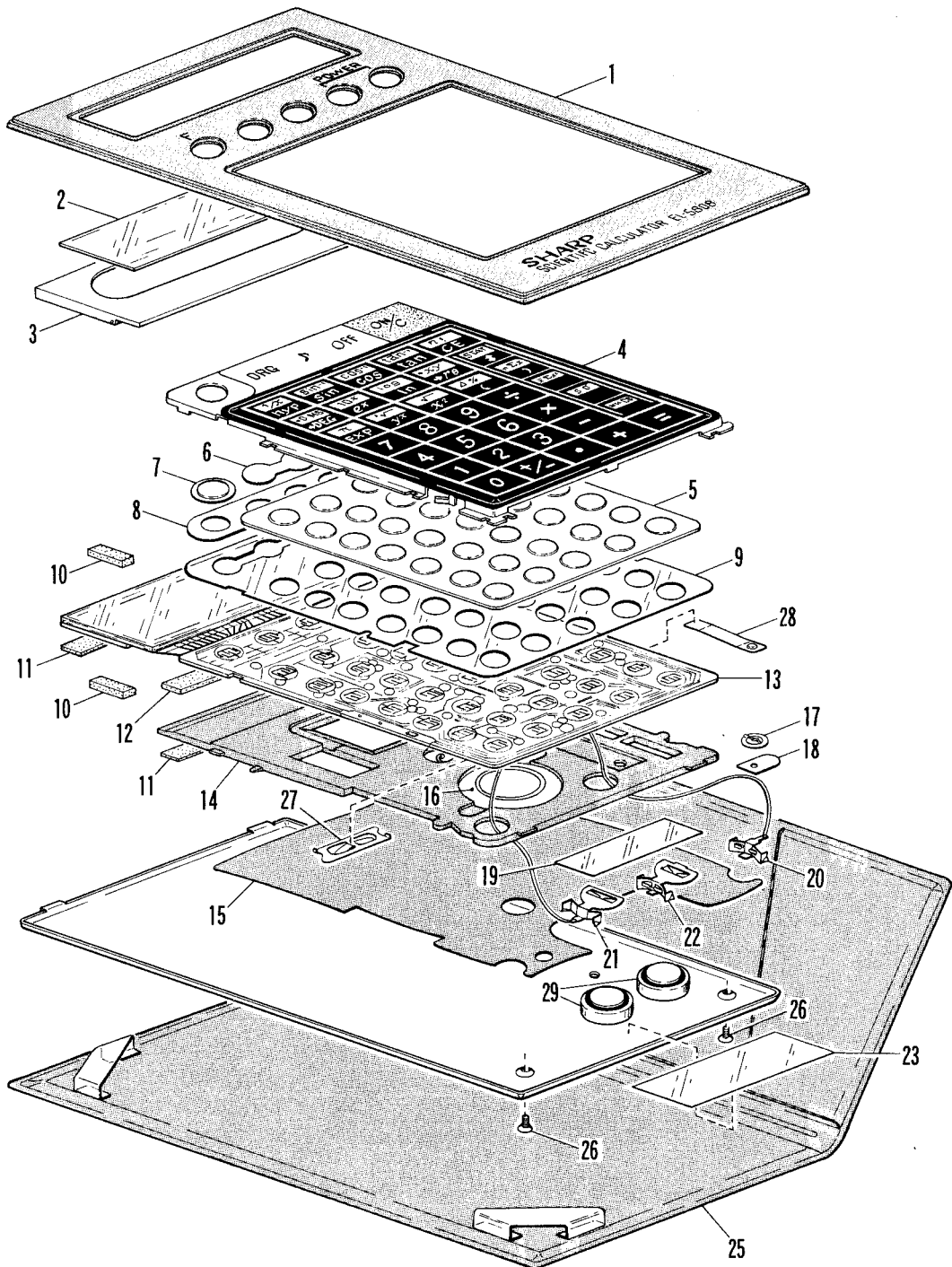
4. PARTS & SIGNAL POSITION



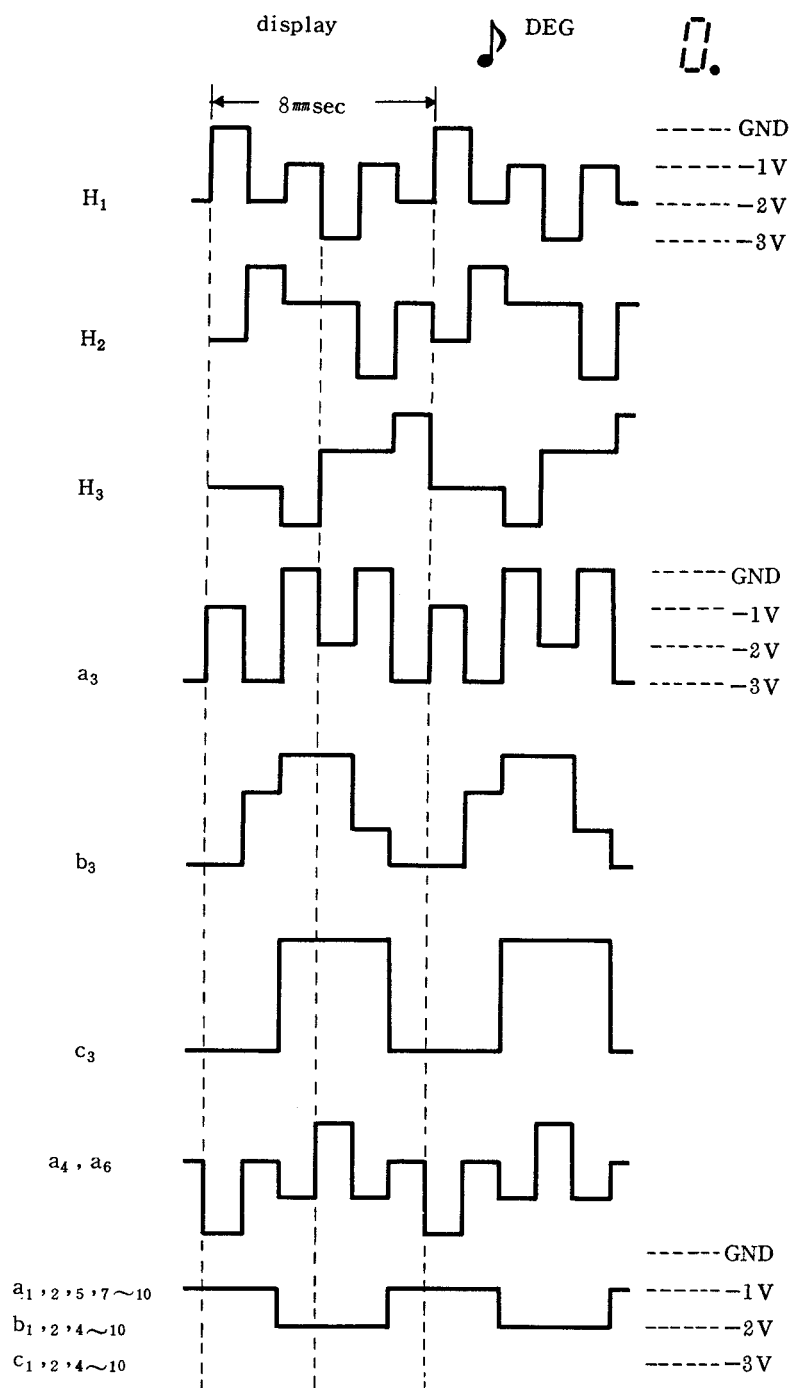
5. PARTS LIST

NO.	PARTS CODE	DESCRIPTION	NEW PARTS MARK	EXPORT PRICE RANK
1	CCABB1976CC01	Top cabinet	N	A R
2	PFILW1188CCZZ	Filter	N	A E
3	PSLDPI129CCZZ	Display mask	N	A D
4	DANGT0412CSZZ	Key panel	N	A K
5	PGUMMI133CCZZ	Key rubber	N	A H
6	PGUMMI134CCZZ	Key rubber (4key)	N	A C
7	PGUMMI136CCZZ	Key rubber (Fkey)	N	A C
8	PSPAPI157CCZZ	Switch spacer (5key)	N	A B
9	PZETLI219CCZZ	Key spacer	N	A A
10	PCUSS1079CCZZ	L. C. D cushion A		A A
11	PSHE-1045CCZZ	L. C. D cushion B		A A
12	PCUSGI099CCZZ	L. C. D cushion C	N	A A
13	DUNTK5053CSZZ	P. W. B unit (with L. S. i, L. C. D and electronics parts)	N	B K
14	DWAKM0416CSZZ	Chassis (with buzzer)	N	A K
15	PSLDPI128CCZZ	Sheet	N	A B
16	RALMB1003CCZZ	Buzzer		A G
17	PHOKWI002CCZZ	Hook		A A
18	PSHEPI028CCZZ	Sheet fixing book		A A
19	PZETLI221CCZZ	Mylar sheet (for top cabinet)	N	A A
20	QTANZI205CCZZ	Battery terminal (+)	N	A C
21	QTANZI206CCZZ	Battery terminal (-)	N	A C
22	QTANZI207CCZZ	Battery terminal (+, -)	N	A B
23	PZETLI220CCZZ	Mylar sheet (for bottom panel)	N	A A
24	HDECA1423CCZZ	Bottom panel (w/o mylar sheet)	N	A L
25	UBAGZI131CCZZ	Book type case	N	A H
26	XBSSC20P04000	Screw		A A
27	LANGTI213CCZZ	Buzzer angle		A B
28	QCNTMI036CCZZ	All reset switch contact	N	A B
	PPAPMI003CCZZ	Memo pad		A A
	SPAKC2802CCZZ	Packing case (U. S. A)	N	A B
	SPAKC2804CCZZ	Packing case (Other countries)	N	A B
	TCAUKI123CCZZ	Caution label		A A
	TINSE2239CCZZ	Instruction book (English)	N	A D
	TINSM2240CCZZ	Instruction book (E, F, G, S)	N	A G
	RC-CZ1008CCZZ	Capacitor 82PF 50WV	N	A A
	RC-KZ1007CCZZ	Capacitor 100PF		A B
	RC-SZ1007CCZZ	Capacitor 1μF		A F
	RVR-M3511QCZZ	Variable resistor 300Kohm		A D
	VHISC3579// - I	L. S. i SC3579	N	B E
	VRC-MT2BG101K	Resistor 1/8W 100ohm ±10%		A A

6. PARTS GUIDE



7. SIGNAL WAVEFORM



SHARP CORPORATION
 Industrial Instrument Group
 Service Control Dept.
 Yamatokoriyama, Nara 639-11, Japan
 July 1978